

TM 11-5965-280-15

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL
DS, GS, AND DEPOT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

HANDSET H-189/GR

This reprint includes all changes in effect at the time of
publication; changes 1 through 3.

HEADQUARTERS, DEPARTMENT OF THE ARMY

OCTOBER 1966

TECHNICAL MANUAL
No. 11-5965-280-15

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 20 October 1966

OPERATOR, ORGANIZATIONAL, DS, GS, AND DEPOT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST

HANDSET H-189/GR

	Paragraph	Page
Scope	1	1
Index of equipment publications	2	1
Forms and records	3	1
Purpose and use	4	2
Technical characteristics	5	2
Description	6	2
Connecting and using H-189/GR	7	2
Operator's maintenance	8	3
Organizational maintenance	9	3
Direct support maintenance	10	5
APPENDIX A. REFERENCES		
B. BASIC ISSUE ITEMS		
C. MAINTENANCE ALLOCATION		
D. ORGANIZATIONAL , DS, GS, AND DEPOT REPAIR PARTS		

1. Scope

This manual describes Handset H-189/GR (fig. 1). It includes maintenance allocation (app C), maintenance instructions, and a list of repair parts available to organizational, direct support, general support, and depot personnel (app D).

2. Index of Equipment Publications

Refer to the latest issue of DA PAM 310-4 to determine whether there are new editions, changes, or additional publications pertaining to this equipment. Department of the

Army Pamphlet 310-4 is an index of current technical manuals, technical bulletins, supply manuals, supply bulletins, lubrication orders, and modification work orders available through publications supply channels. The index lists the individual parts (-15, -25P, etc) and the latest changes to and revisions of each equipment publication.

3. Forms and Records

a. *Reports of Maintenance and Unsatisfactory Equipment.* Use equipment forms and records in accordance with instructions in TM 38-750.

b. Report of Damaged or Improper Shipment. Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700-58 (Army), NAVSANDA publication 378 (Navy), and AFR 71-4 (Air Force).

c. Reporting of Equipment Manual Improvements. DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting discrepancies and recommendations for improving this manual. The form will be completed by the individual using the manual and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL-MR-NMP-AD, Fort Monmouth, N. J., 07703.

4. Purpose and Use

The H-189/GR is a lightweight handset. It is used with portable and vehicular radio equipment. The earphone portion is thin enough to slip under Combat Helmet M1.

5. Technical Characteristics

Frequency response . _____ 300 to 3,500 cps.
Weight 1lb, 3 oz.
Microphone impedance ____ 150 ohms.
Microphone resistance _____ Approximately 3.3 ohms.
Earphone impedance ----- 1,000 ohms.
Earphone resistance ____ -_ Approximately 23 ohms.

6. Description

(fig. 1)

The H-189/GR is a light, watertight, durable handset. It is 8 inches long, 1-9/16

inches wide, and tapers in thickness from 7/8 inches to 3/8 inches. The microphone and earphone elements are plug-in type (fig. 2). A push switch (5, fig. 3), which is inclosed in the handset, is a double-pole, single-throw bar-activated type with normally open contacts. When the bar is depressed, the contacts close in sequence; the microphone circuit first, and then the control circuit. The H-189/GR has a 24-inch retractile cord which will extend to over 6 feet. The cord is terminated in a 5-pin connector type U-229/U. A clip on the back of the handset permits it to be attached to clothing.

7. Connecting and Using H-189/GR (fig. 1)

a. Connecting. Insert Connector U-229/U into the proper receptacle on the equipment and slowly rotate the connector clockwise with a steady forward pressure. When the guide pins of the connector are in the proper grooves, the connector will move forward and seat itself. Twist the knurled portion of the connector to the right and pull sharply to set the connector.

b. Using. Hold the handset so that the earphone is against the ear and the microphone is approximately one-half inch from the lips. The earphone can be slipped under Combat Helmet M1. To talk, depress the switch bar; to listen, release the switch bar.

c. Disconnecting. To disconnect the H-189/GR from the equipment, slowly rotate Connector U-229/U counterclockwise with a steady forward pressure.

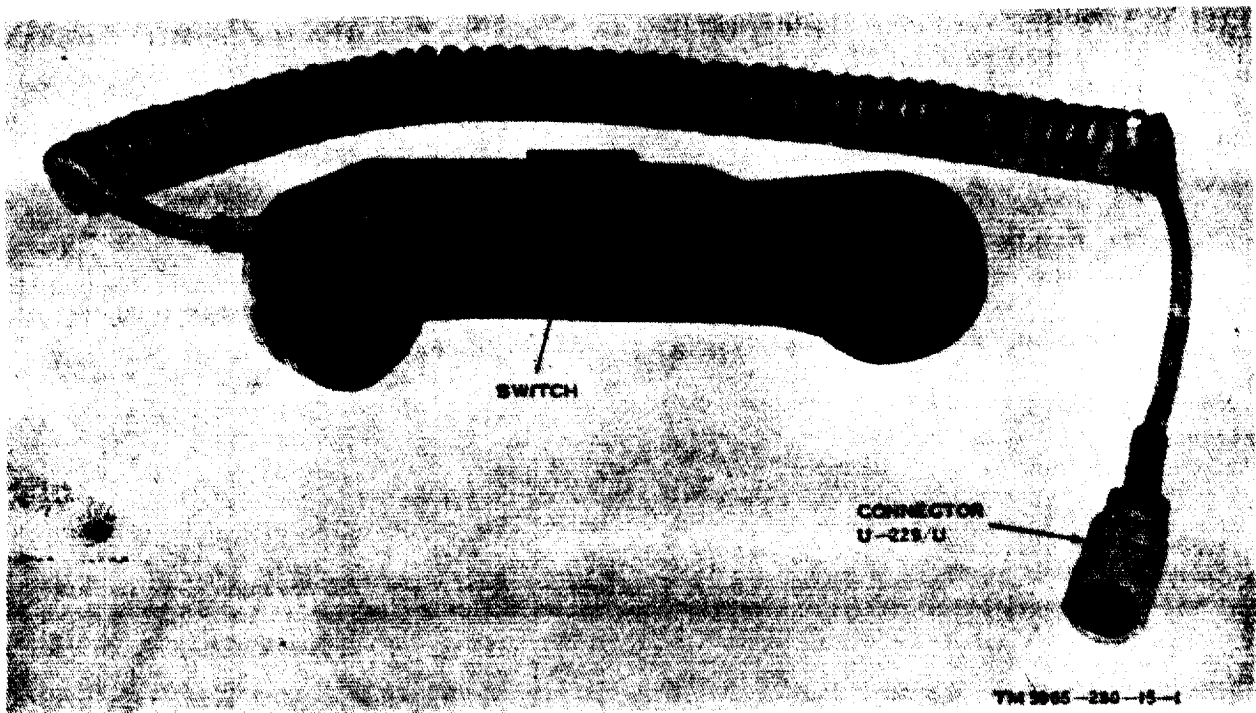


Figure 1. Handset H-189/GR.

8. Operator's Maintenance

Operator's maintenance consists primarily of preventive maintenance. Follow the preventive maintenance procedures for the equipment with which the H-189/GR is used.

Caution: When cleaning the receiver-transmitter cover (9, fig. 2) and the microphone mouthpiece (4, fig. 2), do not insert sharp tools into the holes.

9. Organizational Maintenance

(fig. 2)

Organizational maintenance consists of replacing the microphone and earphone elements, shields, packing, O-ring, and covers and lubrication of the O-ring in the U-229/U. The microphone and earphone elements can be checked by substitution. No tools are required for replacing these parts.

a. Removal of Microphone Element.

- (1) Remove the microphone mouthpiece (4) by turning it counterclockwise.
- (2) Remove the microphone shield (3),

the preformed packing (2), and the microphone element (1) from the handle.

b. Replacing Microphone Element.

- (1) Place the microphone element (1) in the handle with the element pins aligned with the contacts in the handle.

Caution: Failure to properly align the pins with the contacts may damage the element.

- (2) Replace the preformed packing (2) over the microphone element.
- (3) Replace the microphone shield (3) over the preformed packing.
- (4) Replace the microphone mouthpiece (4) and tighten it by turning it clockwise.

c. Removal of Earphone Element.

- (1) Remove the receiver-transmitter cover (9) by turning it counterclockwise.

- (2) Remove the earphone shield (8), the preformed packing (7), and the earphone element (6) from the handle.

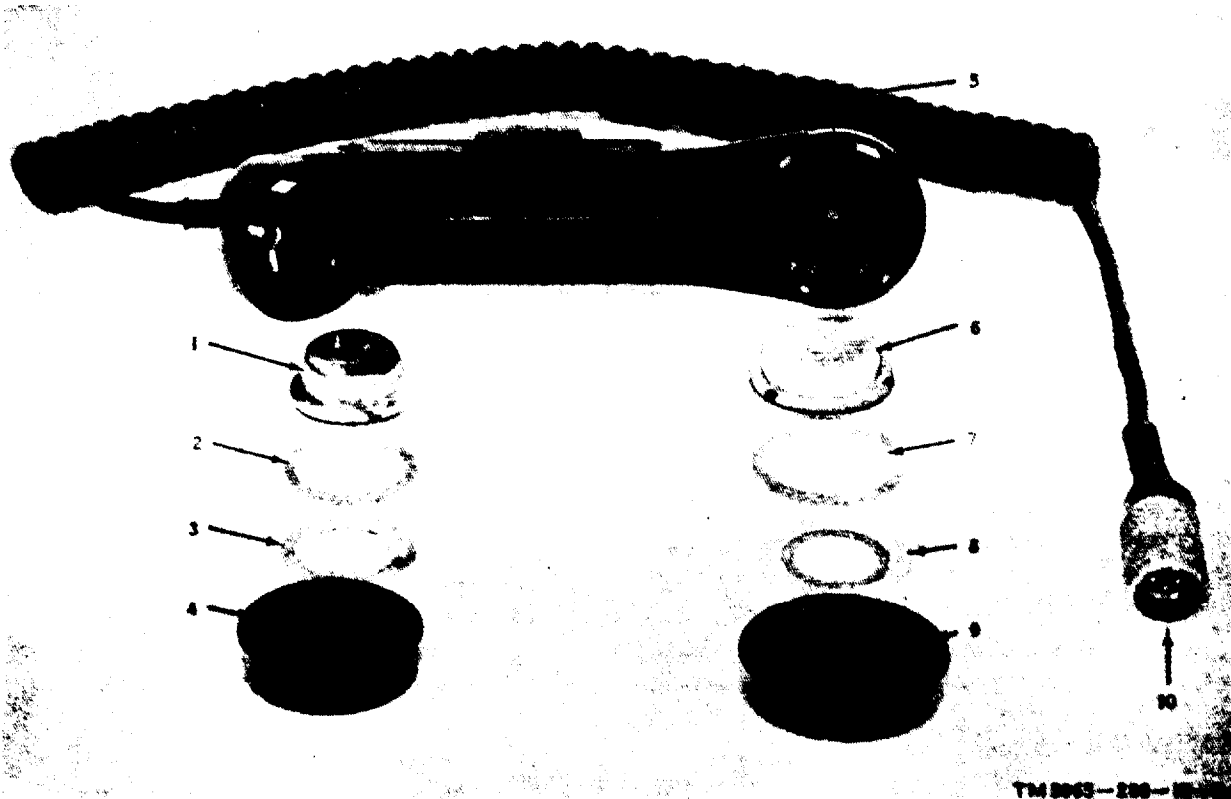
d. Replacing Earphone Element.

- (1) Place the earphone element (6) in the handle with the pins aligned with the contacts in the handle.

Caution: Failure to properly align

the pins with the contacts may damage the element.

- (2) Replace the preformed packing (7) over the earphone element (6).
- (3) Replace the earphone shield (8) over the preformed packing.
- (4) Replace the receiver-transmitter cover (9) and tighten it by turning it clockwise.



- 1 Microphone element (MK1)
- 2 Preformed packing (MP7)
- 3 Microphone shield (E2)
- 4 Microphone mouthpiece (MP6)
- 5 Cable assembly (W1)

- 6 Earphone element (HT1)
- 7 Preformed packing (MP8)
- 8 Earphone shield (E1)
- 9 Receiver-transmitter cover (MP4)
- 10 O-ring (MP2)

Figure 2. Handset H-189/GR, microphone and earphone elements removed.

e. Lubrication of O-ring in Connector U-229/U. The O-ring (10, fig. 2) fits in a groove inside the body of the U-229/U. It provides a seal when the H-189/GR is connected to a radio set. The O-ring may become lost or damaged when it is being connected or disconnected. To prevent this, apply a small amount of Dow-Corning Co. DC-4 Silicone

Compound (FSN 5870-221-5903) to the O-ring to permit it to roll in its groove. Apply it as often as necessary to obtain smooth connect and disconnect of the U-229/U.

Caution: DO NOT allow any of the lubricant to be applied to the contacts.